

REMARKS

Claim 21 has been amended to incorporate the subject matter of claim 22, which had previously been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Accordingly, claim 22 has been cancelled, without prejudice or disclaimer. Dependent claims 23 and 24 have also been amended to depend from claim 21, rather than claim 22. Claims 1, 3-13, 15-21, 23-25, 27-30 and 32-37 are currently pending in the present application. Reconsideration and allowance of the present application based on the following remarks are respectfully requested.

Claim 21 was rejected under 35 U.S.C. § 102(b) as being anticipated by International Patent Application Publication No. WO 99/49504 to Fukami et al. ("Fukami"). Applicant traverses this rejection for at least the following reasons.

Applicant submits that the cited portions of Fukami fail to disclose, teach, or suggest an immersion lithographic projection apparatus comprising *inter alia* a "liquid supply system comprising at least one immersion liquid inlet port provided on a boundary of the space, not provided on the substrate table, and mechanically isolated from the projection system, and at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port," as recited in claim 21.

Respectfully, Applicant submits that there is no indication in Fukami that the supply pipe 21 is mechanically isolated from the projection system. The cited portions of Fukami are completely silent as to how the supply pipe 21 is connected to the lithography apparatus. Indeed, the cited portions of Fukami makes no mention or suggestion of the supply pipe port being mechanically isolated from the projection system.

In view of the Examiner's burden under 35 U.S.C. § 102(b), Applicant submits that the cited portions of Fukami fail to sufficiently and clearly disclose at least one immersion liquid inlet port mechanically isolated from the projection system. MPEP § 2125 provides that "[d]rawings and pictures can anticipate claims if they clearly show the structure which is claimed. *In re Mraz*, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972). However, the picture must show all the claimed structural features and how they are put together. *Jockmus v. Leviton*, 28 F.2d 812 (2d Cir. 1928)." Applicant submits that there is simply not enough disclosure in the cited portions of Fukami of all the claimed structural features and how they are put together. For example, the schematic diagram of Figures 1 and 2 of Fukami, and its associated description, fail to provide any information or disclosure on how supply pipe 21 is mechanically isolated from the projection lens PL. Certainly, it is implausible that the liquid

supply device 5 including the supply pipe 21 are suspended in mid-air with nothing holding them up. Applicant submits that the Examiner has failed to adequately establish or prove that supply pipe 21 in Fukami is mechanically isolated from the projection lens PL. The Examiner's unsupported assertion that the supply pipe 21 in Fukami is mechanically isolated is simply not sufficient.

Further, Applicant submits that the cited portions of Fukami do not disclose, teach, or suggest, a liquid supply system comprising at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port.

Accordingly, Applicant respectfully submits that a case of anticipation has not been established and that the cited portions of Fukami fail to disclose, teach, or suggest each and every element recited by claim 21. Thus, Applicant respectfully requests that the rejection of claim 21 under 35 U.S.C. § 102(b) over Fukami should be withdrawn and the claim be allowed.

Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,480,910 to Takanashi et al. ("Takanashi") in view of U.S. Patent Application Publication No. 2002/0109823 to Binnard et al. ("Binnard"). Applicant traverses this rejection for at least the following reasons.

Applicant submits that the cited portions of Takanashi fail to disclose, teach, or suggest an immersion lithographic projection apparatus comprising *inter alia* a "liquid supply system comprising at least one immersion liquid inlet port provided on a boundary of the space, not provided on the substrate table, and mechanically isolated from the projection system, and at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port" as recited in claim 21.

As acknowledged and admitted by the Examiner "Takanashi does not expressly disclose the inlet port (13) being mechanically isolated from the projection system." Further, Applicant submits that the cited portions of Takanashi do not disclose, teach, or suggest, a liquid supply system comprising at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port.

For example, the cited portions of Binnard fail to disclose anything about immersion lithography and so fail to overcome the deficiencies of Takanashi. The cited portions of Binnard disclose that the wafer stage assembly 100 may be supported by a first vibration system 122, while the projection lens 78 is supported by a second vibration isolation system 124. *See* paragraph [0041] of Binnard. However, Binnard simply makes no mention or

suggestion of a liquid supply system, let alone a liquid supply system comprising at least one immersion liquid inlet port provided on a boundary of the space is mechanically isolated from the projection system, and at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port, as recited in claim 21.

Accordingly, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the cited portions of Takanashi, Binnard, or any proper combination thereof, fail to disclose, teach, or suggest each and every element recited by claim 21. Thus, Applicant respectfully requests that the rejection of claim 21 under 35 U.S.C. § 103(a) over Takanashi in view of Binnard should be withdrawn and the claim be allowed.

Claims 25, 28, and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukami in view of U.S. Patent No. 6,781,668 to Schuster et al. ("Schuster"). Applicant traverses this rejection for at least the following reasons.

As discussed above, the cited portions of Fukami fail to disclose, teach, or suggest each and every claim element of claim 21.

Applicant submits the cited portions of Schuster fail to disclose anything about immersion lithography and so fail to overcome the deficiencies of Fukami. For example, the cited portions of Schuster simply make no mention or suggestion of at least one immersion liquid inlet port provided on a boundary of the space, not provided on the substrate table, and mechanically isolated from the projection system, and at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port, as recited in claim 21.

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the cited portions of Fukami, Schuster, or any proper combination thereof, fail to disclose, teach, or suggest each and every element recited by claim 21. Claims 25, 28, and 29 depend from claim 21 and are, therefore, patentable for at least the same reasons provided above related to claim 21, and for the additional features recited therein. Thus, Applicant respectfully requests that the rejection of claims 25, 28, and 29 under 35 U.S.C. § 103(a) over Fukami in view of Schuster should be withdrawn and the claims be allowed.

Claim 27 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Fukami in view of U.S. Patent No. 6,788,477 to Lin ("Lin"). Applicant traverses this rejection for at least the following reasons.

As discussed above, the cited portions of Fukami fail to disclose, teach, or suggest each and every claim element of claim 21.

The cited portions of Lin fail to overcome the shortcomings of Fukami. For example, the cited portions of Lin fail to disclose, teach, or suggest an immersion liquid inlet port provided on a boundary of the space, not provided on the substrate table, and mechanically isolated from the projection system, at least one immersion liquid outlet port being radially outwardly of the at least one immersion liquid inlet port, as recited in claim 21.

Therefore, Applicant respectfully submits that a *prima facie* case of obviousness has not been established and that the cited portions of Fukami, Lin, or any proper combination thereof, fail to disclose, teach, or suggest each and every element recited by claim 21. Claim 27 depends from claim 21 and is, therefore, patentable for at least the same reasons provided above related to claim 21, and for the additional features recited therein. Thus, Applicant respectfully requests that the rejection of claim 27 under 35 U.S.C. § 103(a) over Fukami in view of Lin should be withdrawn and the claims be allowed.


All rejections and objections have been addressed. It is respectfully submitted that the present application is in condition for allowance, and a notice to that effect is earnestly solicited. Should there be any questions or concerns regarding this application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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